

DEFINITIONS USED IN PUBLIC WATER SUPPLY SUPERVISION

401 KAR Chapter 8:010

401 KAR 8:010. Definitions for 401 KAR Chapter 8.

KRS 224.10-100(30) and 224.10-110 authorizes the cabinet to promulgate administrative regulations for the regulation and control of the purification of water for public and semipublic use. This administrative regulation is necessary to define terms used by the cabinet in 401 KAR Chapter 8.

Section 1. Definitions.

(1) "Action level" means:

(a) The concentration of lead or copper in water specified in 401 KAR 8:300, Section 2, which determines, in some cases, the treatment requirements contained in 401 KAR 8:300 that a water system shall complete; or

(b) As used in 401 KAR 8:075, the concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a water system shall follow.

(2) "Approved source" means the source of the water whether it be from a spring, well, public water system, or other source that has been sampled and the water analyzed, and found to be of a safe and sanitary quality and quantity in accordance with 401 KAR Chapter 8.

(3) "Auxiliary intake" means a piping connection or other device whereby raw water may be secured for treatment from a location or source other than the intake which is normally used.

(4) "Best available technology" or "BAT" means the best technology, treatment techniques, or other means which the cabinet finds, after examination for efficacy under field conditions, and not solely under laboratory conditions, are available to the public water system, taking cost into consideration. For the purposes of setting maximum contaminant levels for synthetic organic chemicals, BAT shall be at least as effective as granular activated carbon.

(5) "Blood lead level" or "PbB level" means the concentration of lead in the blood as measured in micrograms of lead per deciliter of blood, or mg/dl.

(6) "Board" means the Kentucky Board of Certification of Water Treatment Plant and Water Distribution System Operators.

(7) "Boil water advisory" means a type of consumer advisory that provides notice to the consuming public through radio, television, direct mail, electronic mail, posting, newspaper or other media and that conveys in the quickest and most effective manner possible:

(a) Information that water provided by a system may cause adverse human health effects due to possible biological contamination if consumed, unless it is first boiled for three (3) minutes at a rolling boil; and

(b) What action the public is advised to take.

(8) "Bottled water" means water that is from an approved bottled water treatment plant and is placed in a sealed container or package and is offered for human consumption or other consumer uses.

(9) "Bottled water system" means a public water system that provides bottled drinking water and includes the sources of water, and treatment, storage, bottling, manufacturing, or distribution facilities. The term excludes:

(a) A public water system that provides only a source of water supply for a bottled water system; and

(b) An entity providing only transportation, distribution or sale of bottled water in sealed bottles or other sealed containers.

(10) "Bottled water treatment plant" means a facility which provides the product water used for bottled water by processing water from an approved source.

(11) "Bypass" means a physical arrangement whereby water may be diverted around any feature of the purification process of a public or semipublic water supply.

(12) "Cabinet" means the Environmental and Public Protection Cabinet, Department for Environmental Protection, Division of Water, or its successor.

(13) "Certificate" means a certificate of competency issued by the secretary or his designated agent stating that the operator has met all requirements for the specified operator classification as set by 401 KAR Chapter 8.

(14) "Certified laboratory" means a laboratory where the physical, instrumental, procedural, and personnel capabilities have been approved by either the U.S. Environmental Protection Agency or the cabinet and that is certified for one (1) or more types of the contaminants listed or for one (1) or more of the specific constituents or combinations of constituents listed in 401 KAR Chapter 8.

(15) "Check samples" means monitoring samples taken subsequent to a routine compliance sample and at the same location to determine if results of the routine sample are valid.

(16) "Coagulation" means a process using coagulant chemicals and mixing by which colloidal and suspended materials are destabilized and agglomerated into flocs.

(17) "Commercial facility" means a building or other place at which commerce or trade takes place.

(18) "Community water system" means a public water system that serves at least fifteen (15) service connections used by year-round residents or regularly serves at least twenty-five (25) year-round residents.

(19) "Compliance cycle" means the nine (9) year calendar-year cycle during which public water systems shall monitor. Each compliance cycle shall consist of three (3) three (3) year compliance periods. The first calendar year began January 1, 1993 and ended December 31, 2001; the second began January 1, 2002 and ends December 31, 2010; and the third begins January 1, 2011 and ends December 31, 2019.

(20) "Compliance period" means a three (3) year calendar-year period within a compliance cycle. Each compliance cycle has three (3) three (3) year compliance periods. Within the first compliance cycle, the first compliance period ran from January 1, 1993 to December 31, 1995; the second from January 1, 1996 to December 31, 1998; the third from January 1, 1999 to December 31, 2001.

(21) "Comprehensive performance evaluation" or "CPE" means a thorough review and analysis of a treatment plant's performance-based capabilities and associated administrative, operation, and maintenance practices.

(22) "Confluent growth" means a continuous bacterial growth covering the entire filtration area of a membrane filter, or a portion of the filter, in which bacterial colonies are not discrete.

(23) "Consecutive public water systems" means two (2) or more public water systems with interconnected distribution systems, the effect of which is to distribute water from one (1) system to the next.

(24) "Consumer advisory" means a notice to the consuming public through radio, television, direct mail, electronic mail, posting, newspaper, or other media to convey in the quickest and most effective manner possible:

(a) Information that water provided by a system may cause adverse human health effects if consumed and what action the public is advised to take; or

(b) Other information that the public needs to know about its water.

(25) "Consumer confidence report" means the annual report prepared by a community water system pursuant to 401 KAR 8:075 that informs consumers of the quality of the water distributed by the system and characterizes the risks of exposure to contaminants found in drinking water.

(26) "Contaminant" means a physical, chemical, biological, or radiological substance or other matter found in water.

(27) "Contaminant group" means all of the constituent members that collectively comprise the individual bacteriological, inorganic chemical, organic chemical, radiological, volatile organic chemical, synthetic organic chemical, and secondary contaminant groups regulated by 401 KAR Chapter 8.

(28) "Conventional filtration treatment" means a series of processes including coagulation, flocculation, sedimentation, and filtration resulting in substantial particulate removal.

(29) "Corrosion" means the dissolution or erosion of pipe or other plumbing material by water.

(30) "Corrosion inhibitor" means a substance capable of reducing the corrosivity of water toward metal plumbing materials, especially lead and copper, by forming a protective film on the interior surface of those materials.

(31) "Corrosivity" means the tendency of water to form or dissolve calcium carbonate as a film or scale.

(32) "CPE" means a comprehensive performance evaluation.

(33) "Cross connection" means a physical connection or arrangement between two (2) otherwise separate systems, one (1) of which contains potable water and the other being either water of unknown or questionable safety, or steam, gas, or chemicals, whereby there may be flow from one (1) system to the other, the direction of flow depending on the pressure differential between the two (2) systems.

(34) "CT" or "CT calc" means the product of "residual disinfectant concentration" (C) in mg/l determined before or at the first customer and the corresponding "disinfectant contact time" (T) in minutes, i.e., "C" x "T". If a public water system applies disinfectants at more than one (1) point prior to the first customer, it shall determine the CT of each disinfectant sequence before or at the first customer to determine the total percent inactivation or "total inactivation ratio". In determining the total inactivation ratio, the public water system shall determine the residual disinfectant concentration of each disinfection sequence and corresponding contact time before subsequent disinfection application points. "CT99.9" means the CT value required for ninety-nine and nine-tenths (99.9) percent (3-log) inactivation of *Giardia lamblia* cysts.

CT calc

CT99.9

is the inactivation ratio. The sum of the inactivation ratios, or total inactivation ratio shown as

(CT calc)

CT99.9

is calculated by adding together the inactivation ratio for each disinfection sequence. A total inactivation ratio equal to or greater than one and zero-tenths (1.0) is assumed to provide a 3-log inactivation of *Giardia lamblia* cysts.

(35) "Customer" means, as used in 401 KAR 8:075, a billing unit or service connection to which water is delivered by a community water system.

(36) "Department" means the Kentucky Department for Environmental Protection.

(37) "Detected" means, as used in 401 KAR 8:075, at or above the level prescribed by:

(a) 401 KAR 8:250, Section 1(4), for an inorganic contaminant;

(b) 401 KAR 8:400, Section 1(18) or 401 KAR 8:420, Section 1(7), for an organic contaminant; or

(c) 40 C.F.R. 141.25(c), for a radioactive contaminant, as adopted without change in Section 2 of this administrative regulation.

(38) "Diatomaceous earth filtration" means a process resulting in substantial particulate removal in which a precoat cake of diatomaceous earth filter media is deposited on a support membrane, or septum, and while the water is filtered by passing through the cake on the septum, additional filter media known as body feed is continuously added to the feed water to maintain the permeability of the filter cake.

(39) "Direct filtration" means a series of processes including coagulation and filtration but excluding sedimentation resulting in substantial particulate removal.

(40) "Direct responsible charge" means personal, first hand responsibility, control or supervision of the operation of a public water system.

(41) "Disinfectant" means an oxidant added to water in a part of the treatment or distribution process, that is intended to kill or inactivate pathogenic microorganisms.

(42) "Disinfectant contact time" means the time in minutes that it takes for water to move from the point of disinfectant application or the previous point of disinfectant residual measurement to a point before or at the point where residual disinfectant concentration ("C") is measured. It is also the "T" in a CT calculation. If only one (1) "C" is measured, "T" means the time in minutes that it takes for water to move from the point of disinfectant application to a point before or at the point where residual disinfectant concentration ("C") is measured. If more than one (1) "C" is measured, "T" means for the first measurement of "C", the time in minutes that it takes for water to move from the first or only point of disinfectant application to a point before or at the point where the first "C" is measured and for subsequent measurements of "C", the time in minutes that it takes for water to move from the previous "C" measurement point to the "C" measurement point for which the particular "T" is being calculated. Disinfectant contact time in pipelines shall be calculated based on "plug flow" by dividing the internal volume of the pipe by the maximum hourly flow rate through that pipe. Disinfectant contact time within mixing basins and storage reservoirs shall be determined by tracer studies or an equivalent demonstration.

(43) "Disinfection" means a process which inactivates pathogenic organisms in water by chemical oxidants or equivalent agents.

(44) "Disinfection profile" means a summary of daily *Giardia lamblia* inactivation through the treatment plant, developed according to the procedure in 401 KAR 8:160, Section 3.

(45) "Distributed water" means water leaving the water treatment facility and entering the distribution system.

(46) "Division" means the Division of Water.

(47) "DOC" means dissolved organic carbon, measured by milligrams per liter, or mg/l.

(48) "Domestic or other nondistribution system plumbing problem" means a coliform contamination problem in a public water system with more than one (1) service connection that is limited to the specific service connection from which the coliform-positive sample was taken.

(49) "Dose equivalent" means the product of the absorbed dose from ionizing radiation and the factors that account for differences in biological effectiveness due to the type of radiation and its distribution in the body as specified by the International Commission on Radiological Units and Measurements, or ICRU.

(50) "Effective corrosion inhibitor residual", as used in 401 KAR 8:300, means a concentration sufficient to form a passivating film on the interior walls of a pipe.

(51) "Enhanced coagulation" means the addition of coagulation sufficient for improved removal of disinfection byproduct precursors by conventional filtration treatment.

(52) "Enhanced softening" means the improved removal of disinfection byproduct precursors by precipitative softening.

(53) "Fee" means a monetary charge to be assessed by the cabinet.

(54) "Filter profile" means a graphical representation of individual filter performance, based on continuous turbidity measurements or total particle counts versus time for an entire filter run, from startup to backwash inclusively. It includes an assessment of filter performance while another filter is being backwashed.

(55) "Filtration" means a process for removing particulate matter from water by passage through porous media.

(56) "First draw sample" means a one (1) liter sample of tap water, collected in accordance with 401 KAR 8:300, Section 8(2)(b), that has been standing in plumbing pipes at least six (6) hours and is collected without flushing the tap.

(57) "Flocculation" means a process to enhance agglomeration or collection of smaller floc particles into larger, more easily settleable particles through gentle stirring by hydraulic or mechanical means.

(58) "Free flowing tap or outlet" means a tap or outlet that when turned on is flowing freely. It shall not mean a continuously operating tap.

(59) "GAC10" means granular activated carbon filter beds with an empty-bed contact time of ten (10) minutes based on average daily flow and a carbon reactivation frequency of every 180 days.

(60) "Gross alpha particle activity" means the total radioactivity due to alpha particle emission as inferred from measurements on a dry sample.

(61) "Gross beta particle activity" means the total radioactivity due to beta particle emission as inferred from measurements on a dry sample.

(62) "Groundwater source" means a source of water for a public or semipublic water supply that does not have a free water surface exposed to the atmosphere or contain 10,000 mg/L or more total dissolved solids, and is not under the direct influence of surface water.

(63) "Groundwater under the direct influence of surface water" means water beneath the surface of the ground with significant occurrence of insects or other macroorganisms, algae, large-diameter pathogens such as *Giardia lamblia*, or *Cryptosporidium*, or significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH, which closely correlate to climatological or surface water conditions. Direct influence shall be determined for individual sources in accordance with the cabinet's "Guidance for Determination of Groundwater under the Direct Influence of Surface Water, September 1993", incorporated by reference in Section 3 of this administrative regulation. The cabinet's determination of direct influence may be based on site-specific measurements of water quality as well as documentation of well construction characteristics and geology with field evaluation.

(64) "HAA5" means haloacetic acid five (5).

(65) "Haloacetic acid compounds" means monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid.

(66) "Haloacetic acid five (5)" or "HAA5" means the sum of the concentrations, in milligrams per liter, of the haloacetic acid compounds, rounded to two (2) significant digits after addition.

(67) "Halogen" means one (1) of the chemical elements chlorine, bromine, or iodine.

(68) "Initial compliance period" means the first full three (3) year compliance period: January 1993 to December 1995 for systems serving more than 150 service connections. For the contaminants listed at 401 KAR 8:250, Section 12(11) to (15); 401 KAR 8:400, Section 2(19) to (33); and 401 KAR 8:420, Section 2(1)(s) to (u); the initial compliance period shall be January 1996 to December 1998 for systems having fewer than 150 service connections.

(69) "Lake primarily used for drinking water" means a type of water supply reservoir.

(70) "Large water system", as used in 401 KAR 8:300, means a water system that serves more than 50,000 persons.

(71) "Lead-free", as used in 401 KAR 8:300, means:

(a) If used with respect to solders and flux: solders and flux containing not more than two-tenths (0.2) percent lead;

(b) If used with respect to pipes and pipe fittings: pipes and pipe fittings containing not more than eight and zero-tenths (8.0) percent lead; and

(c) If used with respect to plumbing fittings and fixtures intended by the manufacturer to dispense water for human ingestion: fittings and fixtures that are in compliance with standards established in accordance with 42 U.S.C. Section 300g-6(e).

(72) "Lead service line" means a service line made of lead which connects the water main to the building inlet and any lead pigtail, gooseneck, or other fitting which is connected to the lead line.

(73) "Legionella" means a genus of bacteria, some species of which have caused a type of pneumonia called Legionnaires Disease.

(74) "Manmade beta particle and photon emitters" means all radionuclides emitting beta particles and photons listed in "Maximum Permissible Body Burdens and Maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure," U.S. Department of Commerce, National Bureau of Standards, Handbook 69, except the daughter products of thorium-232, uranium-235, and uranium-238. The document is incorporated by reference in Section 3 of this administrative regulation.

(75) "Maximum contaminant level" or "MCL" means:

(a) The maximum permissible level of a contaminant in water which is delivered to a user of a public water system as measured at points specified in 401 KAR Chapter 8; or

(b) As used in 401 KAR 8:075: the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

(76) "Maximum contaminant level goal" or "MCLG" means the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

(77) "Maximum residual disinfectant level" or "MRDL" means:

(a) A level of a disinfectant added for water treatment that shall not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects; or

(b) As used in 401 KAR 8:075, pursuant to 40 C.F.R. 141.153(c): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

(78) "Maximum residual disinfectant level goal" or "MRDLG" means:

(a) The maximum level of a disinfectant added for water treatment at which no known anticipated adverse effect on the health of persons would occur, and which allows an adequate margin of safety. MRDLGs are nonenforceable health goals and do not reflect the benefit of the addition of the chemical for control of waterborne microbial contaminants; or

(b) As used in 401 KAR 8:075: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

(79) "Maximum total trihalomethane potential" means the maximum concentration of total trihalomethanes, or TTHMs, produced in a given water containing excess free chlorine residuals after seven (7) days retention at a temperature of twenty-five (25) degrees Celsius, or seventy-seven (77) degrees Fahrenheit, or above.

(80) "MCL" means maximum contaminant level.

(81) "MCLG" means maximum contaminant level goal.

(82) "Medium-size water system", as used in 401 KAR 8:300, means a water system that serves greater than 3,300 and less than or equal to 50,000 persons.

(83) "Mineral water" means bottled water that contains no less than 250 parts per million total dissolved solids.

(84) "MRDL" means maximum residual disinfectant level.

(85) "MRDLG" means maximum residual disinfectant level goal.

(86) "Near the first service connection" means at one (1) of the twenty (20) percent of service connections in the entire system that are nearest the water supply treatment facility, as measured by water transport time within the distribution system.

(87) "Noncommunity water system" means a public water system that serves at least fifteen (15) service connections used by persons for a period less than year-round or that serves an average of at least twenty-five (25) individuals daily at least sixty (60) days of the year but less than year-round. Noncommunity water systems are either transient or nontransient.

(88) "Nontransient noncommunity water system" means a system that serves at least twenty-five (25) of the same persons over six (6) months of the year.

(89) "NTU" means nephelometric turbidity unit.

(90) "Operator" means a person who has on-site responsibility and authority to conduct the procedures and practices necessary to ensure that the water supply system or a portion thereof is operated in accordance with the laws and administrative regulations of the commonwealth; or to supervise others in conducting the procedures and practices. Maintenance personnel and others who do not participate directly in the production or distribution of potable water are not included in the term "operator".

(91) "Optimal corrosion control treatment", as used in 401 KAR 8:300, means the corrosion control treatment that minimizes the lead and copper concentrations at users' taps while ensuring that the treatment does not cause the water system to violate any national primary drinking regulations.

(92) "Performance evaluation sample" means a reference sample provided to a laboratory for the purpose of demonstrating that the laboratory is able to successfully analyze the sample within limits of performance specified by the cabinet. The true value of the concentration of the reference material is unknown to the laboratory when the analysis is performed.

(93) "Person" means an individual, trust, firm, joint stock company, corporation including a government corporation, partnership, association, federal agency, state agency, city, commission, political subdivision of the commonwealth, or any interstate body.

(94) "Picocurie" or "pCi" means that quantity of radioactive material producing 2.22 nuclear transformations per minute.

(95) "Point of disinfectant application" means the point where the disinfectant is applied and water downstream of that point is not subject to recontamination by surface water runoff.

(96) "Point-of-entry treatment device" means a treatment device applied to the drinking water entering a house or building for the purpose of reducing contaminants in the drinking water distributed throughout the house or building.

(97) "Point-of-use treatment device" means a treatment device applied to a single tap used for the purpose of reducing contaminants in drinking water at that one (1) tap.

(98) "Potable water" means water that meets the provisions of 401 KAR Chapter 8, the quality of which is approved by the cabinet for human consumption.

(99) "Private water supply" means a residual water supply located on private property for the use of one (1) to three (3) residential households.

(100) "Product water" means the water processed by a bottled water treatment plant that is used for bottled drinking water.

(101) "Professional engineer" means an engineer who is licensed as a professional engineer in Kentucky, pursuant to KRS Chapter 322.

(102) "Public water system" means a water system for the provision to the public of water for human consumption through a pipe or other constructed conveyance, if the system has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days of the year. The term includes collection, treatment, storage, and distribution facilities under control of the operator of the system and used primarily in connection with the system, and collection and pretreatment storage facilities not under control of the operator of the water system that are used primarily in connection with the water system.

(103) "PWSID number" means the seven (7) digit identification number assigned to a public water system by the cabinet. The first three (3) digits shall identify the county in which the public water system is primarily located.

(104) "Rem" means the unit of dose equivalent from ionizing radiation to the total body or an internal organ or organ system.

(105) "Repeat compliance period" means any subsequent compliance period after the initial compliance period.

(106) "Residual disinfectant concentration" means the concentration of disinfectant measured in mg/l in a representative sample of water. It is the "C" in a CT calculation.

(107) "Sanitary survey" means an on-site review of the water source, facilities, equipment, and operation and maintenance of a public water system for the purpose of evaluating the adequacy of source, facilities, equipment, and operation and maintenance for producing and distributing safe drinking water.

(108) "Secondary contaminants" means contaminants which do not, in general, have a direct impact on the health of consumers but whose presence in excessive quantities may discourage the utilization of drinking water and discredit the supplier.

(109) "Secondary standards" means the maximum contaminant levels for secondary contaminants.

(110) "Secretary" means the secretary for the Environmental and Public Protection Cabinet.

(111) "Sedimentation" means a process for removal of solids before filtration by gravity or separation.

(112) "Semipublic water system" means a water system made available for drinking or domestic use that does not qualify as a private or public water system.

(113) "Service line sample" means a one (1) liter sample of water, collected in accordance with 401 KAR 8:300, Section 8(2)(c), that has been standing for at least six (6) hours in a service line.

(114) "Single family structure", as used in 401 KAR 8:300, means a building constructed as a single-family residence that is currently used as either a residence or a place of business.

(115) "Slow sand filtration" means a process involving passage of raw water through a bed of sand at low velocity, generally less than four-tenths (0.4) m/h, resulting in substantial particle removal by physical and biological mechanisms.

(116) "Small water system", as used in 401 KAR 8:300, means a water system that serves 3,300 persons or fewer.

(117) "Specific analysis" means a laboratory analysis or procedure acceptable to the cabinet for determining the amount of a specific constituent of a type of contaminant regulated by 401 KAR Chapter 8.

(118) "Standard sample" means the aliquot of finished drinking water that is examined for the presence of coliform bacteria.

(119) "Step 2 requirement" means an alternate or alternative minimum TOC removal requirement pursuant to 401 KAR 8:510.

(120) "Supplier of water" means a person who owns or operates a public water system.

(121) "Surface water" means water which is open to the atmosphere and subject to surface runoff, or groundwater under the direct influence of surface water.

(122) "Surface water source" means ponds, reservoirs, streams of all sizes, free-flowing springs, or a source of water supply for a public water system that has a free water surface exposed to the atmosphere, or groundwater under the influence of surface water.

(123) "SUVA" means specific ultraviolet absorption at 254 nanometers, or nm. It is an indicator of the humic content of water, calculated according to the procedures in 40 C.F.R. 141. 131, adopted without change in Section 2 of this administrative regulation.

(124) "System" means a public water system.

(125) "System with a single service connection" means a system that supplies drinking water to consumers via a single service line.

(126) "THM" means trihalomethane.

(127) "TOC" means total organic carbon.

(128) "Too numerous to count" means the total number of bacterial colonies exceeds 200 on a forty-seven millimeter (47-mm) diameter membrane filter used for coliform detection.

(129) "Total organic carbon" or "TOC" means total organic carbon in mg/l, measured using heat, oxygen, ultraviolet irradiation, chemical oxidants, or combinations of these oxidants, that convert organic carbon to carbon dioxide, rounded to two (2) significant figures.

(130) "Total trihalomethanes" or "TTHMs" means the arithmetic sum of the concentrations in milligrams per liter of the trihalomethane, or THM, compounds, trichloromethane, dibromochloromethane, bromodichloromethane, and tribromomethane, rounded to two (2) significant figures.

(131) "Transient noncommunity water system" means a noncommunity water system that does not regularly serve at least twenty-five (25) of the same persons over six (6) months per year.

(132) "Treatment technique" means a required process intended to reduce the level of a contaminant in drinking water.

(133) "Trihalomethane" or "THM" means one (1) family of organic halogen compounds resulting from the displacement of three (3) of the four (4) hydrogen atoms in methane with chlorine, bromine, or iodine atoms in the molecular structure.

(134) "TTHM" means total trihalomethanes.

(135) "Turbidity" means the presence of suspended particulates, including sand, silt, clay, finely divided organic or inorganic matter, plankton or other microscopic organisms or elements which optically interfere with the clarity of liquids.

(136) "Uncovered finished water storage facility" means a tank, reservoir, or other facility that is open to the atmosphere and is used to store water that will undergo no further treatment except residual disinfection.

(137) "Variance and exemption" means, as used in 401 KAR 8:075, a permission issued by the cabinet pursuant to 401 KAR 8:060 to not meet an MCL or a treatment technique under certain conditions described in 401 KAR 8:060.

(138) "Virus" means a virus of fecal origin which is infectious to humans by waterborne transmission.

(139) "Water distribution system" means the portion of the water supply system in which water is conveyed from the water treatment plant or other supply point to the premises of a consumer or a system of piping and ancillary equipment which is owned and operated by an established water system independent of the water supply system from which potable water is purchased.

(140) "Water supply reservoir" means, as used in 401 KAR 8:020, Section 2(18), a lake or reservoir so designated by its developer, a public water system drawing raw water from the lake, a local government, and a property owner having an interest in the lake and the watershed upstream of the dam or downstream outlet of the lake.

(141) "Water supply system" means the source of supply and all structures and appurtenances used for the collection, treatment, storage, and distribution of water for a public or semipublic water supply.

(142) "Water treatment plant" or "purification plant" means that portion of the water supply system which is designated to alter either the physical, chemical, or bacteriological quality of the water prior to entry to the water distribution system.

(143) "Waterborne disease outbreak" means the significant occurrence of acute infectious illness, epidemiologically associated with the ingestion of water from a public water system that is deficient in treatment as determined by the cabinet.

Section 2. Federal Regulation Adopted Without Change. (1) 40 C.F.R. 141.25(c) and 141.131, July 2003.

(2) The subject matter of this administrative regulation relating to the definitions of "detected" and "SUVA" is governed by those federal regulations.

Section 3. Incorporation by Reference.

(1) The following material is incorporated by reference:

(a) "Guidance for Determination of Groundwater Under the Direct Influence of Surface Water, September 1993"; and

(b) "Maximum Permissible Body Burdens and Maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure, U.S. Department of Commerce, National Bureau of Standards, Handbook 69, June 5, 1959, and Addendum 1, August 1963."

(2) This material may be inspected, copied, or obtained, subject to applicable copyright law, at Division of Water, Drinking Water Branch, 14 Reilly Road, Frankfort, Kentucky 40601, Monday through Friday, 8 a.m. to 4:30 p.m., or through www.water.ky.gov/dw. (17 Ky.R. 584; Am. 1422; eff. 11-15-90; 18 Ky.R. 1165; 1841; eff. 11-26-91; 20 Ky.R. 3010; 21 Ky.R. 309; eff. 8-24-94; 23 Ky.R. 2538; eff. 5-14-97; 27 Ky.R. 1546; 2505; 2728; eff. 4-9-2001; 31 Ky.R. 149; 734; 1081; eff. 1-4-05.)